JAP7 Rec'd PCT/PTO 30 JUN 2006'

PTO-1390 (Rev. 07-2005) Approved for use through 3/31/2007. OMB 0651-0021

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TRANSMITTAL LETTER TO THE UNITED STATES DESIGNATED/ELECTED OFFICE (DO/FO/US)

ATTORNEY'S DOCKET NUMBER 1457 (06-40)

CON	CERNING A SUBMISSIO	U.S. APPLICATION NO. (If known, see 37 CFR 1.5)					
	10NAL APPLICATION NO. 52004/044042	INTERNATIONAL FILING DATE 30 December 2004	PRIORITY DATE CLAIMED 2 January 2004				
TITLE OF INVENTION Fusion-Cast Refractory with High Electrical Resistivity							
APPLICANT(S) FOR DO/EO/US GUPTA, Amul; WINDER, Steven M.							
Applicant herewith submits to the United States Designated/Elected Office (DO/EO/US) the following items and other information:							
1. 🔼 T	This is a FIRST submission of items concerning a submission under 35 U.S.C. 371.						
2. T	his is a SECOND or SUBSEQUENT submission of items concerning a submission under 35 U.S.C. 371.						
	his is an express request to begin national examination procedures (35 U.S.C. 371(f)). The submission must include items 5), (6), (9) and (21) indicated below.						
4. X T	he US has been elected (Article 31).						
5.	A copy of the International Application as filed (35 U.S.C. 371(c)(2))						
	a. X is attached hereto (required only if not communicated by the International Bureau).						
	b. has been communicated by the International Bureau.						
	c. X is not required, as the applic	cation was filed in the United States Receiv	ing Office (RO/US).				
6.	An English language translation of the	e International Application as filed (35 U.S.C	C. 371(c)(2)).				
	a. is attached hereto.	·					
	b. has been previously submit	ted under 35 U.S.C. 154(d)(4).					
_{7.} X	Amendments to the claims of the International Application under PCT Article 19 (35 U.S.C. 371(c)(3))						
	a. are attached hereto (required only if not communicated by the International Bureau).						
	b. have been communicated	by the International Bureau,					
	c. have not been made; however, the time limit for making such amendments has NOT expired.						
	d. Anave not been made and v	vill not be made.					
8. 🔲	An English language translation of the amendments to the claims under PCT Article 19 (35 U.S.C. 371(c)(3)).						
9.	An oath or declaration of the inventor(s) (35 U.S.C. 371(c)(4)).						
10.	An English language translation of the Article 36 (35 U.S.C. 371(c)(5)).	e annexes of the International Preliminary E	xamination Report under PCT				
Items 11 to 20 below concern document(s) or information included:							
11. 🛛	An Information Disclosure Statement	under 37 CFR 1.97 and 1.98.					
12. X	An assignment document for recording. A separate cover sheet in compliance with 37 CFR 3.28 and 3.31 is included.						
13. X	A preliminary amendment.						
14. X	An Application Data Sheet under 37 CFR 1.76.						
15.	A substitute specification.						
16. 🔲	A power of attorney and/or change of address letter.						
17.	A computer-readable form of the sequence listing in accordance with PCT Rule 13ter.2 and 37 CFR 1.821- 1.825.						
18.	A second copy of the published Intern	national Application under 35 U.S.C. 154(d)	o(4).				
19.	A second copy of the English language	ge translation of the international application	n under 35 U.S.C. 154(d)(4).				

This collection of information is required by 37 CFR 1.414 and 1.491-1.492. The information is required to obtain or retain a benefit by the public, which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11 and 1.14. This collection is estimated to take 15 minutes to complete, including gathering information, preparing, and submitting the completed form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450, DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop PCT, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450. Page 1 of 3

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PTO-1390 (Rev. 07-2005)

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U.S. APPLICATION NO. (If known, see 37 CFR 1.5)			PCT/US2004/04404		ATTORNEY'S DOCKET NUMBER 1457 (06-40)		
20. Other items or information: Return receipt postcard							
The follow	wing fees have b	een submitted			CALCULATIONS	PTO USE ONLY	
21. 🕅 Basic	national fee (37	CFR 1,492(a))		\$300	\$ 300		
22. 🔀 Exami							
If the written opinion by IPEA/U All other situations	IS indicates all cla	\$ 200					
If the written opinion	ndicates all claim	\$ 100					
Internation International Searc	nal Searching Aut ch Report prepare communicated to						
т	OTAL OF 21, 22	600					
Additional fee for specification and drawings filed in paper over 100 sheets (excluding sequence listing in compliance with 37 CFR 1.821(c) or (e) or computer program listing in an electronic medium) (37 CFR 1.492(j)). The fee is \$250 for each additional 50 sheets of paper or fraction thereof.							
Total Sheets	1		dditional 50 or fraction RATE o to a whole number)			:	
- 100 =	/50 =			x \$250	\$		
Surcharge of \$130.00 for furnishing any of the search fee, examination fee, or the oath or declaration after the date of commencement of the national stage (37 CFR 1.492(h)).							
CLAIMS	NUMB			RATE	\$		
Total claims		13-20=	0	× \$ 50	\$		
Independent claim	ns	3 -3=	0	x \$200	\$		
MULTIPLE DEPENDENT CLAIM(S) (if applicable) + \$360					\$		
TOTAL OF ABOVE CALCULATIONS =					\$		
Applicant claims small entity status. See 37 CFR 1.27. Fees above are reduced by 1/2. SUBTOTAL = \$							
D	\$400.00 to a fermi	\$					
Processing fee of \$130.00 for furnishing the English translation later than 30 months from the earliest claimed priority date (37 CFR 1.492(i)).							
		\$					
Fee for recording to by an appropriate		\$ 40					
		\$ 770					
					Amount to be refunded:	\$	
					Amount to be charged	\$	

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A check in the amount of \$ to cover the above fees is enclosed. in the amount of \$_770 ь. X Please charge my Deposit Account No. 220281 _ to cover the above fees. A duplicate copy of this sheet is enclosed. Fees are to be charged to a credit card. WARNING: Information on this form may become public. Credit card information should not be included on this form. Provide credit card information and authorization on PTO-2038. NOTE: Where an appropriate time limit under 37 CFR 1.495 has not been met, a petition to revive (37 CFR 1.137(a) or (b)) must be filed and granted to restore the International Application to pending status. SEND ALL CORRESPONDENCE TO: SIGNATURE Donald M. Satina James R. Williams General Counsel **Vesuvius USA Corporation** NAME 250 Parkwest Drive 43,268 Pittsburgh, PA 15275 REGISTRATION NUMBER tel: 412-429-1800

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor)	GUPTA
Title)	Fusion-Cast Refractory with High Electrical Resistivity
Inter'l Appl. No.	PCT/US2004/044042
Inter'l Filing Date	30 December 2004
Priority Date	02 January 2004
Attorney Docket No.)	1457 (06-40)

To: Commissioner for Patents

P.O. Box 1450

Alexandria, VA 22313-1450

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Pursuant to the provisions of 37 C.F.R. §§ 1.10 and 1.53, applicant respectfully requests that this application be assigned a serial number.

James R. Williams, Reg. No. 43,268